

### REMARKS

This communication is a full and timely response to the final Office Action dated December 16, 2005. By this communication, claim 2 is canceled without prejudice or disclaimer to the underlying subject matter, and claims 1, 18, 23 and 25-28 have been amended. Support for the subject matter added to these claims can be found variously throughout the specification, for example, on page 7, lines 14-23 and page 8, lines 18-23. Claims 1-28 remain pending. Further, the Abstract has been amended to improve form.

#### **Rejections Under 35 U.S.C §102**

Claims 1-5, 8-13, 16-28 were rejected under 35 U.S.C. §102(e) as anticipated by *Downs*, U.S. Patent No. 6,226,618. Applicants respectfully traverse this rejection.

In accordance with the claimed invention, the audio content of an audio signal is divided into sections, and one of these audio content sections is distorted by means of a key. The audio signal also includes watermarking information having a robust watermark layer and a fragile watermark layer. The key is embedded and recoverable from another one of the sections through the fragile watermarking layer. Independent claims 1, 18, 23, and 25-28 recite that watermarking information includes a robust watermarking layer and a fragile watermarking layer and a key is embedded through the fragile watermarking layer.

The robust and fragile watermarking layers are interrelated and protect each other. Both quality control information and copyright information are embedded into an audio file, where quality control information is embedded using the fragile watermark, and copyright information is embedded using the commonly known

robust watermark. The key is stored in quality control information in the format of a fragile watermark. The fragile watermark provides a second protection to the distributed content.

*Downs* discloses a method of securely providing content over the Internet to a user. The method encrypts metadata and audio content with a symmetric key.

Digital watermarking technology is used to embed information that defines the allowable number of secondary copies and playbacks and provide the means to identify the origin of authorized or unauthorized copies of content.

*Downs* discloses that the watermarked data is hidden in an audio file, but fails to describe how watermarking is achieved and what type of watermarking technique is used. Without this information, one of ordinary skill can only assume that *Downs* applies the commonly used watermarking technique, which is a robust watermarking method, to embed the hidden data directly into the audio signal.

Furthermore, there is no evidence that *Downs* uses the watermarking technique, and more particularly, a fragile watermark, to embed a key into an audio signal as recited in the claims. Because *Downs* fails to disclose every element recited in independent claims 1, 18, 23 and 25-28, Applicants submit that these claims and their associated depending claims are not anticipated. Applicants request, therefore, that the rejection of claims 1-5, 8-13, and 16-28 be withdrawn and these claims be allowed.

### **Rejections Under 35 U.S.C. §103**

Claims 6, 7, and 14 were rejected under 35 U.S.C. §103(a) as unpatentable over *Downs* in view of *Schneier, Apply Cryptography*, 1996, John Wiley & Sons Inc.,

pages 351-353 and 355. Claim 15 was rejected under 35 U.S.C. §103(a) as unpatentable over *Downs* in view of *Jones*, U.S. Patent No. 6,697,944. Applicants respectfully traverse these rejections.

Claims 6, 7, 14, and 15 depend from claim 1. By virtue of these dependencies, Applicants submit that these claims are allowable for at least the same reasons discussed above with respect to claim 1. In addition, these claims are further distinguishable over *Downs*, *Schneier*, and *Johns*, by the additional elements recited therein. Furthermore, Applicants submit that neither *Schneier* nor *Johns*, applied individually or in combination with *Schneier*, teach or suggest embedding a key in a section of an audio signal using a fragile watermark, as recited in claim 1. Applicants request therefore, that the rejections of claims 6, 7, 14 and 15 under 35 U.S.C. §103 be withdrawn and these claims be allowed.

**Conclusion**

Based on at least the foregoing amendments and remarks, Applicants submit that claims 1-28 are allowable, and this application is in condition for allowance.

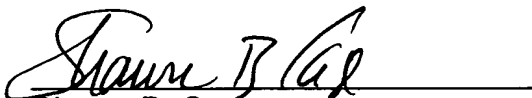
Accordingly, Applicants request a favorable examination and consideration of the instant application. In the event the instant application can be placed in even better form, Applicants request that the undersigned attorney be contacted at the number below.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: June 16, 2006

By:



Shawn B. Cage

Registration No. 51,522

P.O. Box 1404  
Alexandria, VA 22313-1404  
703.836.6620